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Executive Summary

Introduction

This Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) addresses the environmental impacts that could result from implementing the proposed Imperial Irrigation District (IID) Water Conservation and Transfer Project (collectively referred to as the Proposed Project or Project). The Draft EIR/EIS was prepared in accordance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) to inform the public and meet the needs of local, state, and federal permitting agencies. The United States (US) Department of the Interior (DOI), Bureau of Reclamation (Reclamation) is the federal Lead Agency under NEPA, and IID is the state Lead Agency under CEQA.

The Proposed Project involves implementation by IID of a long-term (75 years) water conservation program to conserve up to 300 thousand acre-feet per year (KAFY) of Colorado River water and the transfer of this conserved water by IID to the San Diego County Water Authority (SDCWA), Coachella Valley Water District (CVWD), and/or Metropolitan Water District of Southern California (MWD). The Proposed Project also includes a Habitat Conservation Plan (HCP) to address federal and state endangered species requirements under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA). The terms of the water conservation and transfer transactions are set forth in the Agreement for Transfer of Conserved Water (IID/SDCWA Transfer Agreement) executed by IID and SDCWA in 1998, and the proposed Quantification Settlement Agreement (QSA) to be executed by IID, CVWD, and MWD.

If the QSA is executed, it would be implemented through Reclamation's draft Implementation Agreement (IA), which would commit the Secretary of the DOI (Secretary) to make Colorado River water deliveries in accordance with the QSA terms and conditions. Reclamation is preparing a Draft EIS for the IA; this EIS will also include analysis of Reclamation's Inadvertent Overrun and Payback Policy (IOP), which would establish requirements for payback of inadvertent overuse of Colorado River water. The IOP is a condition precedent to the execution of the IA and QSA and must be in place by the time these agreements go into effect. The Draft IA EIS also covers implementation of biological conservation measures to offset impacts of the Proposed Project on federally listed fish and wildlife species and their critical habitats in the historic floodplain of the LCR.

Project Background and History

IID's initial interest in developing water conservation and transfer projects was a response to proceedings before the State Water Resources Control Board (SWRCB) in the 1980s regarding IID's use of water. In both Decision 1600 (SWRCB 1984) and Order 88-20 (SWRCB 1988), SWRCB ordered IID to develop and implement a meaningful water conservation plan. In Decision 1600, SWRCB concluded: "A transfer of conserved water could partially satisfy future Southern California needs."

In 1996, the Secretary deferred further consideration of any long-term Colorado River surplus guidelines until California put in place a realistic strategy to ensure that it would be able to reduce its annual use of Colorado River water to 4.4 million acre-feet (MAF) in normal years or to meet its needs from sources that do not jeopardize the apportionments of others. Development of this strategy was considered by the Secretary to be a prerequisite for approval of any further cooperative Colorado River water transfers between California agencies. In an effort to prepare for likely reductions of Colorado River water available to California, the Colorado River Board of California prepared California's draft Colorado River Water Use Plan (California Plan).

The California Plan provides a framework for the state to coordinate and assist in the cooperative implementation of diverse programs, projects, and other activities that would reduce California's use of Colorado River water and facilitate conformance with California's annual apportionment. It involves the conservation of water within southern California and the transfer of conserved water from agricultural to predominantly urban uses. It also identifies future groundwater conjunctive use projects that would store Colorado River water when available. The proposed QSA is designed to include key contractual arrangements among IID, MWD, and CVWD, which are needed to implement major components of the California Plan. The Proposed Project, whether implemented with or without the QSA, would accomplish a key goal of the California Plan by transferring up to 300 KAFY of Colorado River water from IID to other users.

The Secretary has developed specific Interim Surplus Guidelines that will provide mainstream users of Colorado River water, particularly those in California that currently use surplus water, with a greater degree of predictability concerning the likelihood of a surplus determination in a given year during an interim period (from 2002 to 2016). The Interim Surplus Guidelines will be used to determine the conditions under which the Secretary may declare the availability and volume of surplus water for use within the States of Arizona, California, and Nevada. The guidelines facilitate California's transition to a reduced supply of Colorado River water, and adoption of the guidelines is a condition precedent to implementation of the QSA. The guidelines would be applied each year as part of the Annual Operating Plan for Colorado River Reservoirs. The guidelines provide certain benchmarks, or milestones, for reduction of California's Colorado River water use. In the event that these milestones are not achieved, the guidelines expressly provide that subsequent surplus determinations would be made on a more conservative basis until such time as California is in compliance with the required reductions.

Project Overview

IID's long-term water conservation program would be implemented within IID's water service area in Imperial County, California, which consists of approximately 500,000 acres. The six geographic subregions that are in the region of influence of the Proposed Project are as follows:

- LCR: The Lower Colorado River (LCR) and its historic 100-year floodplain, from Lake Havasu at Parker Dam to Imperial Dam.

- **IID Water Service Area and AAC:** The IID water service area and the All American Canal (AAC) right-of-way, which extends from the Imperial Valley east to Imperial Dam. As an irrigation district, IID holds rights to take water from the Colorado River and deliver it to farmers, tenants, and landholders in Imperial County. The water is delivered through the AAC into IID's system of irrigation canals that serve the lands within the IID water service area. IID's drainage system collects drainage water from the farmlands and conveys it to the New and Alamo Rivers and the Salton Sea.
- **Salton Sea:** The Salton Sea and its shoreline back to 0.5 feet around the Sea.
- **SDCWA Service Area:** The SDCWA service area, which includes 24 retail water agencies that serve about 90 percent of the population of San Diego County.
- **MWD Service Area:** The MWD service area, which includes 27 cities and water districts that provide water to about 17 million people in parts of Los Angeles, Orange, San Diego, Riverside, San Bernardino, and Ventura Counties.
- **CVWD Service Area:** The CVWD service area, which covers about 640,000 acres mostly in Riverside County but extending into Imperial and San Diego Counties. However, the Proposed Project affects only the portion of the CVWD service area that is entitled to receive Colorado River water, identified as Improvement District No. 1.

The six geographic subregions are shown in Figure 1-1 in Chapter 1 in this Draft EIR/EIS.

Under the Proposed Project, water conservation would be undertaken in the IID water service area using one or more of the following measures:

- On-farm irrigation system improvements, including on-farm irrigation management techniques, which would be implemented by landowners and tenants within IID's water service area.
- Improvements by IID to its water delivery system.
- Subject to certain contractual limitations set forth in the IID/SDCWA Transfer Agreement, fallowing measures to conserve water.

The water conserved by IID would be transferred to SDCWA, CVWD, and/or MWD, for use within the transferees' respective service areas.

Under the Proposed Project, the water transfer would occur in accordance with the terms of the IID/SDCWA Transfer Agreement and, as an alternative scenario that would apply if the QSA is finalized and implemented, in accordance with the modified water transfers provided for under the terms of the QSA. The Proposed Project thus includes the conservation by IID of up to 300 KAFY of water and transfer of that water under one of the following two scenarios:

- **IID/SDCWA Transfer Agreement Implementation Only:** Up to 300 KAFY is transferred to SDCWA pursuant to the terms of the IID/SDCWA Transfer Agreement. This scenario will apply if the QSA is not approved and implemented in its entirety.
- **QSA Implementation:** SDCWA would be limited to 130 to 200 KAFY from IID under the terms of the IID/SDCWA Transfer Agreement; CVWD would have the option of

acquiring up to 100 KAFY of water conserved by IID, in two increments of 50 KAFY each, for use within CVWD's service area. In addition, the QSA would grant MWD an option to acquire all or any portion of this 100 KAFY that CVWD does not acquire, for use in MWD's service area. Under the proposed QSA, the terms of the proposed water transfers to CVWD and MWD are set forth in agreements to be executed between IID and each recipient. This scenario will apply if the QSA is approved and implemented in its entirety.

Under the terms of the IID/SDCWA Transfer Agreement and the QSA and as part of the Proposed Project, IID would voluntarily limit its annual diversions of Colorado River water to 3.1 million acre-feet per year (MAFY), including the water conserved for transfer. Under the QSA, this commitment is subject to Reclamation's implementation of its proposed IOP, which would allow IID to pay back inadvertent exceedances of this diversion cap over a period of years.

The Proposed Project also includes implementation of a HCP to support its Incidental Take Permit applications in conformance with § 10(a)(1)(B) of ESA and § 2081(b) of CESA. The Incidental Take Permits would allow IID to conduct otherwise lawful activities that incidentally take federal and/or state listed and other specified unlisted species that are proposed for coverage in IID's HCP.

Through the HCP, IID is committing to certain management actions that would avoid, minimize, and mitigate the impacts of any take of proposed covered species that might result from covered activities, including aspects of IID's implementation of the IID/SDCWA Transfer Agreement, the QSA, and continuation of its routine water-related O&M activities. O&M activities are included to ensure that IID obtains all ESA and CESA approvals required to continue operation of its irrigation and drainage system for the duration of the Proposed Project. Issuance of an Incidental Take Permit by USFWS constitutes a federal action that requires evaluation under NEPA.

The geographic area covered by the HCP includes all lands comprising the approximately 500,000 acres of IID's water service area (including canal rights-of-way), the Salton Sea, lands owned by IID outside of its water service area that are currently submerged beneath the Salton Sea, and IID's rights-of-way along the AAC downstream from the point of diversion on the LCR, including the desilting basins at Imperial Dam. In addition, the HCP covers any take of covered species that use the Salton Sea if the take is as a result of IID's activities.

The HCP covers 96 listed and unlisted species under ESA and CESA and addresses the activities necessary to implement the Proposed Project within the IID water service area as well as IID's ongoing operation and maintenance (O&M) activities. The HCP includes conservation strategies for the five main habitats used by covered species in the HCP geographic area, including drain habitat, tamarisk scrub habitat, agricultural fields, the Salton Sea, and desert habitat. In addition, the HCP includes species-specific conservation strategies for the burrowing owl, the desert pupfish, and bats.

Project Purpose, Need, and Objectives

The purpose and need for the Proposed Project are described in accordance with NEPA and the objectives are described in accordance with CEQA.

Water Conservation and Transfer Objectives

The water conservation and transfer component of the Proposed Project is defined by the negotiated contractual provisions of two separate agreements: the IID/SDCWA Transfer Agreement and the proposed QSA. These agreements are intended to advance certain individual objectives of the parties to the agreements as well as certain common objectives. The purpose of this component of the Project is to meet the proponents' objectives and expectations for each agreement.

IID has determined that water conservation and transfer projects would provide a means for conserving water, benefiting IID and the recipient water agencies and their service areas in southern California. Water conservation and transfer projects accomplish two objectives: they respond to the SWRCB directive that IID develop and implement a conservation program, and they protect IID's water rights. Under California laws designed to encourage water conservation and voluntary transfers, title to conserved water remains with the transferring entity. On this basis, IID can allow conserved water to be used by another entity while retaining its historic water rights, which have been, and continue to be, the basis for economic activity in the Imperial Valley. Proceeds from a water transfer transaction could be used to fund the costs of implementing conservation measures, particularly the cost of on-farm conservation measures, as well as environmental mitigation costs and other implementation costs. In addition, IID anticipates that proceeds from the sale of conserved water would provide economic benefits to IID, the community, and cooperating landowners and tenants in the Imperial Valley.

The IID/SDCWA Transfer Agreement fulfills the following objectives for IID:

- To conserve water and transfer it in a market-based transaction that provides payments to IID to fund a water conservation program, including the cost of on-farm and system improvements, environmental mitigation costs, and other implementation costs.
- To develop a water conservation program that includes the voluntary participation of Imperial Valley landowners and tenants so that on-farm conservation measures, as well as water delivery system conservation measures, can be implemented.
- To implement a water conservation and transfer program without impairing IID's historic senior-priority water rights, in a manner consistent with state and federal law.
- To provide an economic stimulus to Imperial Valley's agricultural economy and the surrounding community.

The IID/SDCWA Transfer Agreement fulfills the following objectives for SDCWA:

- To acquire an independent, alternate, long-term water supply that provides drought protection and increased reliability for municipal, domestic, and agricultural uses.

- To diversify its sources of water supply and reduce its current dependence on a single source for imported water, in order to enhance the reliability of its water supply.
- To establish a stabilized, competitive price for a significant portion of its water supply.

Both the IID/SDCWA Transfer Agreement and the QSA incorporate crucial elements of California's draft Colorado River Water Use Plan (California Plan), which provides a framework to assist California in reducing its use of Colorado River water to its apportionment of 4.4 MAF in a normal year, and to mitigate the impact on California water agencies and water users associated with the reduction in diversions from the Colorado River. The broad purpose of the QSA, in particular, is to facilitate key elements of the California Plan. The parties to the QSA, which are IID, CVWD, and MWD, have determined that the QSA fulfills the following collective objectives of its proponents:

- To settle, by consensual agreement, long-standing disputes regarding the quantity, priority, use, and transferability of Colorado River water.
- To agree on a plan for the future distribution of Colorado River water among IID, CVWD, and MWD for up to 75 years, based on Colorado River water budgets for IID, CVWD, and MWD.
- To facilitate agreements and actions which, when implemented, would enhance the certainty and reliability of Colorado River water supplies available to IID, CVWD, and MWD, and would assist these agencies in meeting their water demands within California's apportionment of Colorado River water.
- To identify agreed-on terms and conditions for the conservation and transfer of specific amounts of Colorado River water within California.
- To provide incentives to promote conservation of Colorado River water.

Habitat Conservation Plan Objectives

For IID, the objectives of the HCP are:

- To minimize and mitigate the impacts of any take of covered species that might occur as a result of the implementation of the IID/SDCWA Transfer Agreement, the IID water conservation and transfer projects provided for under the QSA, the consensual cap on Colorado River water diversions by IID, and continuation of IID's routine O&M activities in connection with IID's water irrigation and drainage system.
- To provide regulatory assurances to IID that additional mitigation measures to address impacts on covered species would not be required beyond the measures described in the HCP.
- To support issuance of Incidental Take Permits under both the federal and the state Endangered Species Acts for the covered activities.

Reclamation's Purpose and Need

The Secretary proposes to take the federal action necessary to allow the implementation of the Proposed Project. Therefore, Reclamation's underlying purpose and need for the

Proposed Project are to facilitate implementation of the IID/SDCWA Transfer Agreement and the QSA. The Secretary's proposed draft IA represents the federal commitment to implement water deliveries to allow implementation of the QSA; the Proposed Project is a component of the IA, assuming full implementation of the QSA. A comparable implementation agreement would be required to represent the federal commitment to implement water deliveries to allow implementation of the IID/SDCWA Transfer Agreement, if the QSA is not fully implemented. The need for the federal action is to assist California in reducing its use of Colorado River water to its 4.4 MAF apportionment in a normal year. This reduction in California's use of Colorado River water would benefit the entire Colorado River Basin.

USFWS' Purpose and Need

The ESA is intended to identify species needing protection, means to determine the type of protective measures needed, and enforcement measures. The US Secretaries of the Interior (through USFWS) and Commerce (National Marine Fisheries Service, NMFS) are responsible for implementing the ESA.

The ESA provides for a process by which species are reviewed to determine whether they are to be listed and receive protection under the ESA. If a species is listed, this does not mean that individuals or habitat of that species cannot be affected. Sections 7 and 10 of the ESA provide provisions to "take" threatened or endangered species if consultation has concluded with a take authorization. Section 10(a)(1)(B) of the ESA allows USFWS to issue an Incidental Take Permit authorizing take that is incidental to an otherwise lawful activity if the applicant provides a conservation plan meeting the following factors identified in Section 10(a)(2)(B):

- The taking will be incidental.
- The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking.
- The applicant will ensure that adequate funding for the plan will be provided.
- The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild.
- The measures, if any, required under subparagraph (A)(iv) (i.e., any additional measures that USFWS may require as being necessary or appropriate for purposes of the plan) will be met, and USFWS has received any other assurances it requires that the plan will be implemented.

USFWS will determine whether the HCP meets the requirements of ESA and is sufficient to support issuance of Incidental Take Permits. The purpose and need for the HCP is:

- To minimize and mitigate the effects of implementing the covered activities described in the HCP on the covered species identified in the HCP.
- To satisfy the requirements for issuance of Incidental Take Permits pursuant to Section 10(a) of ESA by specifying measures to minimize the effects of the covered activities as well as measures that ensure habitat availability for covered species.

Other Proposed Agreements, Plans, and Projects Related to Resources Affected by the Proposed Project

There are several planned water resources management actions and programs that are closely related to the Proposed Project and that have undergone or are currently undergoing environmental review. Key agreements, programs, and projects that are related to the Proposed Project are listed below.

Proposed Quantification Settlement Agreement

The QSA is a consensual reallocation of Colorado River water based on a series of proposed agreements. These proposed agreements include water conservation/transfer and exchange projects among IID, CVWD, and MWD, including the Proposed Project, assuming implementation under the Proposed Project's second scenario (QSA Implementation). The proposed QSA provides part of the mechanism for California to reduce its water diversions from the Colorado River in normal years to its apportioned amount of 4.4 MAF under the California Plan.

IID, MWD, CVWD, and SDCWA are the co-lead agencies for the preparation, in accordance with CEQA, of a *Draft Program EIR for the Implementation of the Colorado River Quantification Settlement Agreement* (Draft QSA PEIR). The Draft QSA PEIR is a programmatic assessment of the environmental effects of implementation of the QSA by these California water agencies and is intended to provide an overall assessment of the multiple projects included in the QSA. The federal approvals required to implement water deliveries in accordance with the QSA will be evidenced by the Secretary's execution of the IA (see below).

Proposed Implementation Agreement, Inadvertent Overrun and Payback Policy, and Biological Conservation Measures

Implementation of the QSA requires certain federal actions, which are set forth in a proposed IA to be executed by the Secretary. To allow for the implementation of the QSA, the IA would commit the Secretary to make Colorado River water deliveries in accordance with the terms of the IA. Execution of the IA would result in changes in the amount and/or location and use of deliveries of Colorado River water which are necessary to implement the QSA.

Reclamation also proposes to adopt an Inadvertent Overrun and Payback Policy (IOP), which establishes requirements for payback of inadvertent overuse of Colorado River water by Lower Basin Colorado River water users. Reclamation's adoption of the IOP is a condition precedent to the execution of the IA and QSA, and the IOP must be in place by the time these agreements go into effect.

Reclamation also proposes to implement certain biological conservation measures to avoid potential impacts to federally listed fish and wildlife species or their associated critical habitats within the historic floodplain of the Colorado River, between Parker Dam (including Lake Havasu to its full pool elevation) and Imperial Dam, in accordance with USFWS's January 2001 Biological Opinion (BO). Reclamation is the lead agency for preparation, in accordance with NEPA, of a *Draft EIR for the Implementation Agreement (IA), Inadvertent Overrun and Payback Policy (IOP), and Related Federal Actions* (Draft IA EIS).

Proposed Lower Colorado River Multi-Species Conservation Program

The LCR MSCP is a partnership of state, federal, tribal, and other public and private stakeholders; its purposes are as follows:

- Conserve habitat and work toward the recovery of "included species" within the historic floodplain of the LCR, pursuant to ESA, and reduce the likelihood of additional species listings under the ESA.
- Accommodate current water diversions and power production and optimize opportunities for future water and power development, to the extent consistent with law.
- Provide the basis for federal ESA and CESA compliance via incidental take authorizations resulting from the implementation of the first two purposes.

The LCR MSCP covers the mainstream of the LCR from below Glen Canyon Dam to the southerly international boundary with Mexico. The program area includes the historic floodplain and reservoir full-pool elevations. Conservation measures would focus on the LCR from Lake Mead to the international boundary. The program is planned to be implemented over a 50-year period.

Proposed Salton Sea Restoration Project

Implementation of the IID/SDCWA Transfer Agreement and the QSA would change the amount of drainage water that enters the Salton Sea. The Salton Sea Restoration Project is evaluating actions to stabilize the elevation and reduce the salinity of the Salton Sea, pursuant to the Salton Sea Reclamation Act of 1998 [Public Law (PL) 105-372]. A revised draft EIS/EIR, including revised alternatives and modeling and impact analyses, is currently being prepared.

Both the Proposed Project and the Salton Sea Restoration Project have the potential to affect environmental resources at the Salton Sea. However, they are separate projects with different objectives and different timelines for implementation. The Lead Agencies for this Draft EIR/EIS have indicated that the Proposed Project must be assessed now so that, if approved, it will be available to provide reliable supplies of Colorado River water to California water agencies as early as 2002. Timely implementation of the Proposed Project will assist in meeting time deadlines for California's reduction of its Colorado River water use to 4.4 MAF in a normal year and in satisfying the requirements of Reclamation's Interim Surplus Guidelines Record of Decision (ROD). In contrast, no preferred alternative has yet been identified for the Salton Sea Restoration Project, and the project has not been authorized, approved, or funded by Congress. Implementation of the Proposed Project is not inconsistent with subsequent implementation of a restoration project for the Salton Sea.

Proposed Coachella Valley Water Management Plan

CVWD has prepared the Coachella Valley Water Management Plan to establish an overall program for managing its surface and groundwater resources in the future. The plan involves several actions to reduce the current overdraft of the groundwater in the CVWD service area. These actions include increased use of Colorado River water to reduce the need to pump groundwater, water recycling, and conservation measures to decrease the overall

consumption of water. CVWD is the lead agency for preparation, in accordance with CEQA, of a *Draft Program EIR for the Groundwater Management Plan* (Draft CVWD Water Management PEIR), including the effects of receipt and use of conserved water by CVWD within its service area pursuant to the QSA.

A substantial portion of the additional water to be used from the Colorado River is associated with the implementation of the QSA. Under the QSA, from 55 to 155 KAFY of additional Colorado River and State Water Project (SWP) water would be used to replace an equivalent portion of the groundwater now used. Reducing the amount of groundwater pumping and increasing the use of Colorado River water would allow the overdrafted aquifer to begin to recover. Other elements of the Coachella Valley Water Management Plan are not dependent on implementation of the QSA.

Alternatives to the Proposed Project

Project alternatives were selected in accordance with both the CEQA Guidelines and NEPA requirements. A comprehensive alternatives identification, screening, and selection process evaluated 14 alternatives (including the No Project alternative), four of which were determined to: (1) meet most of the Project objectives; (2) have the potential to reduce impacts when compared to the Proposed Project; and/or (3) be potentially feasible. These four alternatives are carried forward for analysis in this Draft EIR/EIS and are described below.

Alternative 1: No Project

The No Project alternative is the scenario under which the Proposed Project is not constructed, permitted, nor implemented. The No Project alternative is not the environmental status quo. Rather, it is defined as "existing environmental conditions," as well as what would reasonably be expected to occur in the foreseeable future if the Proposed Project were not approved, based on current plans and consistent with available infrastructure. Under the No Project alternative, the IID/SDCWA Transfer Agreement would not be implemented, the QSA would not be finalized and implemented, and the HCP would not be finalized and implemented.

Alternative 2: Water Conservation and Transfer of Up To 130 KAFY to SDCWA (On-Farm Irrigation System Improvements as Exclusive Conservation Measure)

Alternative 2 is a scaled back version of the Proposed Project/HCP and includes only the minimum amount of water that could be transferred under the terms of the IID/SDCWA Transfer Agreement, which is 130 KAFY. The 130 KAFY would be conserved exclusively by on-farm irrigation system improvements in the IID water service area. It is important to note that Alternative 2 would not comply with the QSA (if the QSA were finalized) because no water would be made available for transfer to either CVWD or MWD. Under Alternative 2, the water conveyance methods of the Proposed Project would also apply (i.e., water transferred from IID to SDCWA would be diverted at Parker Dam and conveyed via the CRA).

This alternative was developed to reduce the impacts of the Proposed Project by reducing the amount of water conserved. Under Alternative 2, less water would be conserved and transferred than under the Proposed Project.

Alternative 2 was also anticipated to have an incrementally lower level of take of listed species and their habitats and less impact when compared to the amount of water conserved under the Proposed Project. However, reduced conservation and transfer amounts would not substantially reduce the level of take or mitigation requirements for biological resources. Potential impacts along and within IID's canal and drainage system, and in and around the Salton Sea would be substantially similar to those under the Proposed Project. Habitat conditions along the AAC would remain relatively unchanged. IID's ongoing O&M activities would be the same as those outlined in the proposed HCP. As a result, all of the conservation strategies would be substantially the same as under the Proposed HCP.

Alternative 3: Water Conservation and Transfer of Up To 230 KAFY to SDCWA, CVWD, and/or MWD (All Conservation Measures)

Alternative 3 represents a middle level of conservation between the Proposed Project and Alternative 2 by providing for water conservation and transfer of up to 230 KAFY using any type of conservation measure, including on-farm irrigation system improvements, water delivery system improvements, and/or fallowing. The first 130 KAFY would be transferred to SDCWA, and the remaining 100 KAFY would be conserved and transferred either to SDCWA or to CVWD and/or MWD. Water transferred from IID to SDCWA or MWD would be diverted at Parker Dam and conveyed via the CRA. Water transferred to CVWD would remain in the LCR; diversion would occur at Imperial Dam and water would be conveyed to the CVWD service area via the Coachella Canal.

As described under Alternative 2, alternatives were developed to minimize Project-related impacts. Under this alternative, less water would be conserved and transferred than under the Proposed Project.

This alternative was also anticipated to have an incrementally lower level of take and less impact relative to the amount of water conserved under the Proposed Project. However, as described under Alternative 2, reduced conservation and transfer amounts would not substantially reduce the level of take or mitigation requirements for biological resources. Potential impacts along and within IID's canal and drainage system, and in and around the Salton Sea would be substantially similar to those under the Proposed Project. Habitat conditions along the AAC would remain relatively unchanged. IID's ongoing O&M activities would be the same as those outlined in the proposed HCP. As a result, all of the conservation strategies would be substantially the same as under the Proposed HCP.

Alternative 4: Water Conservation and Transfer of Up To 300 KAFY to SDCWA, CVWD, and/or MWD (Fallowing as Exclusive Conservation Measure)

Alternative 4 assumes that fallowing, rather than other conservation methods, would be the exclusive measure used to conserve water. Although fallowing is part of the water conservation program anticipated by the Proposed Project, fallowing as the exclusive conservation measure under Alternative 4 has been isolated as a separate alternative to identify its effects separately.

Fallowing of farmland could be used to meet water conservation objectives because it could reduce the amount of irrigation water that IID would be required to deliver to its water service area. Fallowing is defined as the non-use of farmland for crop production in order to conserve irrigation water, on a short-term or long-term basis.

To implement Alternative 4, the IID/SDCWA Transfer Agreement would need to be amended to allow fallowing as an acceptable method of on-farm water conservation under landowner contracts. The IID Board would also have to rescind or modify its adopted policies that do not currently support fallowing by landowners for purposes of transferring water.

Fallowing could be undertaken by landowners on land they own, lease, or purchase; or, fallowing could be undertaken by IID on land it owns, leases, or purchases. The purpose of the analysis of Alternative 4 is to analyze the potential environmental impacts of fallowing, rather than to predict the exact method of fallowing or who would do it.

In addition, as described under Alternatives 2 and 3, alternatives were developed to minimize Project-related impacts. Under Alternative 4, the use of fallowing as a conservation measure would minimize the impact of reduced flows to the Sea under the Proposed Project, as well as minimize related impacts that could potentially occur in relation to reduced flows to the Sea. However, potential impacts along and within IID's canal and drainage system and in and around the Salton Sea would be substantially similar to those under the Proposed Project. As a result, all of the conservation strategies would be substantially the same as under the Proposed HCP.

Environmentally Superior Alternative

Chapter 4, Alternatives Comparison, includes a detailed analysis and comparison of the Proposed Project with each of the alternatives. As required by CEQA this Chapter also identifies the environmentally superior alternative. CEQA Guidelines (Section 15126.6(e)2), Consideration and Discussion of Alternatives to the Proposed Project, state, "If the environmentally superior alternative is the No Project alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." For this Project, Alternative 2, the No Project Alternative, is environmentally superior to the others; therefore, the following discussion regarding the next environmental superior alternative is provided.

Determination of the environmentally superior alternative is somewhat driven by the selection of an HCP approach for the Salton Sea. Implementation of HCP (Salton Sea Portion) Approach 2 would avoid significant unavoidable impacts on recreation resources and air quality by maintaining Baseline flows to the Salton Sea. *Approach 2 would minimize but not avoid significant, unavoidable impacts on water quality and it would not avoid or minimize impacts on agricultural resources.* To minimize impacts to water quality (selenium impacts to the drains) and impacts on agricultural resources (conversion of prime farmland and farmland of statewide importance), the amount of water conserved and the method of conservation is the determining factor. Alternative 2, 130 KAFY with on-farm irrigation system improvements only along with HCP Approach 2 would avoid recreation, air quality, and agricultural resources impact and would minimize water quality impacts and is therefore the environmentally superior alternative. However, the Proposed Project includes

the flexibility to be implemented with the same methods and quantities as Alternative 2 and so it could also, if implemented this manner, be considered environmentally superior.

Consultation and Coordination

The Lead Agencies have a responsibility under various mandates, including CEQA and NEPA, to conduct public involvement activities and to consult and solicit input from certain federal, state, and local agencies, and other interested parties. The following sections list the specific agencies and other interested parties that are considered Cooperating, Responsible, and/or Trustee Agencies for the purposes of this Draft EIR/EIS.

Cooperating Agencies

- USFWS

Responsible Agencies

- CDFG (also a Trustee Agency)
- SWRCB
- SDCWA

Trustee Agencies

- CDFG (also a Responsible Agency)
- California Department of Parks and Recreation (DPR)
- California State Lands Commission (SLC)

Public Scoping

The scoping process for the Proposed Project was designed to solicit input on the issues related to the Project description, the scope of the impact analysis, and the Project alternatives to be assessed in the Draft EIR/EIS from: (1) the public; (2) federal, state, and local agencies; and (3) other interested parties. Scoping meetings were attended by groups interested in the Proposed Project's potential water delivery system, on-farm conservation measures, and other aspects of the Proposed Project, including potential impacts to the LCR, the Salton Sea, and the SDCWA and IID water service areas.

The Lead Agencies conducted six public scoping meetings between October 12 and October 20, 1999, to solicit input from the public on potential environmental impacts, the significance of impacts, the appropriate scope of the Draft EIR/EIS, proposed mitigation measures, and potential alternatives to the Proposed Project.

In addition to the public scoping meetings mentioned above, a meeting with Indian tribes was held on April 18, 2000, in La Quinta, California. A specific invitation to address cultural resources was made at the meeting. Eight attendees representing three tribes, USFWS, and BIA attended the April 18 meeting. Questions raised by the tribal representatives included the following: whether or not the proposed project would affect Indian Trust Assets (ITAs); what would be the effects on groundwater pumping, especially in the CVWD service area; how the Draft EIR/EIS would address tribal impacts; and what would be the impacts to Salton Sea. In addition, water rights-related issues were raised.

Public Scoping Comments

This section summarizes the content of the written and oral comments submitted during the public scoping process. Generally, commentors were primarily concerned with hydrology and water quality, biological resources, and socioeconomic impacts.

Hydrology and Water Quality. The hydrology- and water quality-related comments were primarily concerned with the effect of the Project on water quality and quantity of the Salton Sea, Colorado River, the Colorado River Delta in Mexico, and other potentially affected streams and watercourses. Several commentors asked that the Draft EIR/EIS address the impacts of the Project at the various levels of water to be conserved and transferred to adequately identify all potential impacts.

Biological Resources. The majority of the biological resources comments focused on the potential impact of the Project on rare, threatened, and endangered species; on wetland habitats; and on proposed mitigation measures to reduce the impacts to a level of insignificance. Commentors also raised concerns over inflows of total dissolved solids (TDS) entering the Salton Sea and the potential impacts to fish and wildlife.

Socioeconomics. The majority of the socioeconomics comments were primarily concerned with the potential socioeconomic impact of the Project on the Salton Sea and Imperial Valley. Many commentors requested that the potential impacts to the agricultural economy of the Imperial Valley be addressed by the Draft EIR/EIS.

Other Areas of Known Controversy

Fallowing. Fallowing lands to conserve water for transfer is a controversial issue within the Imperial Valley, and has been opposed by members of the community based on potential socioeconomic impacts to third parties. The IID Board has adopted a policy stating that landowners participating in IID's water conservation program should not be compensated for fallowing as a means of conserving water for transfer. In addition, the IID/SDCWA Transfer Agreement currently prohibits fallowing as a means of conservation under IID's contracts with participating landowners for the first 200 KAFY. The QSA, however, does not prohibit fallowing. If fallowing is used to conserve water for the first 200 KAFY, the current restrictions on fallowing in the IID/SDCWA Transfer Agreement would need to be waived or modified.

Fallowing may be more desirable for the Salton Sea and endangered species than other conservation measures that are proposed as part of IID's water conservation program as it would minimize and/or avoid many of environmental impacts. It would, however, result in the loss of agricultural sector jobs and a decrease in the value of business output in Imperial County. Some of the adverse effects of fallowing are offset by beneficial effects of the local expenditure of transfer revenues, but the beneficial effects are not large enough to totally outweigh the adverse effects of fallowing.

Salton Sea. Concern has been expressed by environmental groups, Salton Sea area residents, the Salton Sea Authority, and other interested parties about the effect of reduced drainage inflows to the Salton Sea. The Salton Sea is a key stopping point and wintering area on the Pacific Flyway for migratory birds. According to the Salton Sea Authority, more than 400 species have been reported within the Salton Basin, of which about 100 species have been

observed to use the resources of the Salton Sea. The Sea also provides recreational resources, including a productive sport fishery.

The Sea currently has an average salinity level of approximately 44,000 mg/L, and salinity is expected to increase as a result of evaporation and continued salt-laden inflows. The trend of increasing salinity threatens both the biological and the recreational resources at the Sea. Drainage inflows from agricultural irrigation in the IID water service area are the primary source of water for the Sea. Reduced drainage inflows as a result of the proposed water conservation program within the IID water service area are anticipated to accelerate the trend of increasing salinity. Concern has been expressed that this acceleration will affect the cost and feasibility of a Salton Sea restoration project.

Project Impacts Summary

The potential effects of the Proposed Project are evaluated for the following resources in this Draft EIR/EIS:

- Hydrology and Water Quality
- Biological Resources
- Geology and Soils
- Land Use
- Agricultural Resources
- Recreation
- Air Quality
- Cultural Resources
- Indian Trust Assets
- Noise
- Aesthetics
- Public Services and Utilities
- Transportation
- Socioeconomics
- Environmental Justice
- Transboundary Impacts

Table ES-1 summarizes, by resource area, the significant impacts for the Proposed Project, by resource area. Less than significant impacts are described in the first table of each resource area section.

Issues to be Resolved

The issues to be resolved by decision makers, based on the information included in this Draft EIR/EIS and other factors, are the selection of a preferred alternative and the selection of an HCP Approach for the Salton Sea. Four alternatives are presented with their environmental impacts. Additionally, two different approaches for mitigating impacts to the Salton Sea are presented along with their environmental impacts.

TABLE ES-1
Summary of Significant Impacts and Mitigation Measures

Summary of Potential Impacts from Proposed Project	Summary of Mitigation Measure(s)	Significance after Mitigation	Alternative 1: No Project	Alternative 2: 130 KAFY On-Farm Irrigation System Improvements Only	Alternative 3: 230 KAFY All Conservation Measures	Alternative 4: 300 KAFY Fallowing Only
3.1 Hydrology and Water Quality						
WQ-2: Increased selenium concentration in IID surface drain discharges to the Alamo River: Selenium concentration to 9.25 µ/L in the IID surface drain discharge to the Alamo River exceeding water quality criteria of 5 µ/L.	**Mitigation WQ-2:** No reasonable mitigation is available to reduce the concentration of selenium in the drains. The HCP IID Water Service Area Portion includes habitat replacement to mitigate the biological impacts resulting from the increased selenium; however, the selenium concentration itself would not be reduced by the HCP (Significant and unavoidable impact.)	Significant and unavoidable.	Baseline selenium concentration in the IID surface drain discharge to the Alamo River of 6.32 µ/L.	Same as WQ-2 except selenium concentrations to 6.91 µ/L in the IID surface drain discharge to the Alamo River.	Same as WQ-2 except selenium concentrations to 8.88 µ/L in the IID surface drain discharge to the Alamo River.	Beneficial impact: selenium concentration decreases to 6.10 µ/L in the IID surface drain discharge to the Alamo River.
WQ-4: Increase in selenium concentration in the Alamo River at the outlet to the Salton Sea: Selenium concentration to 7.86 µ/L in Alamo River at the outlet to the Sea exceeding water quality criteria of 5 µ/L.	None available.	Significant and unavoidable.	Baseline selenium concentrations in Alamo River at the Outlet to the Sea of 6.25 µ/L.	Less than significant selenium concentrations maintained at 6.25 µ/L in Alamo River at the outlet to the Sea.	Same as WQ-4 except selenium concentrations to 7.39 µ/L in Alamo River at the outlet to the Sea.	Beneficial impact: selenium concentration decreases to 6.13 µ/L in Alamo River at the outlet to the Sea.
WQ-5: Increase in selenium concentration in the IID surface drain discharge to the New River: Selenium concentration to 8.30 µ/L in the IID Surface drain discharge to the New River exceeding water quality criteria of 5 µ/L.	**Same as Mitigation WQ-2.**	Significant and unavoidable.	Baseline selenium concentration in the IID Surface drain discharge to the New River of 6.51 µ/L.	Same as WQ-5 except selenium concentrations to 7.15 µ/L in the IID Surface drain discharge to the New River.	Same as WQ-5 except selenium concentrations to 7.90 µ/L in the IID Surface drain discharge to the New River.	Less than significant impact: Minimal decrease in selenium concentrations to 6.50 µ/L in the IID Surface drain discharge to the New River.

TABLE ES-1
Summary of Significant Impacts and Mitigation Measures

Summary of Potential Impacts from Proposed Project	Summary of Mitigation Measure(s)	Significance after Mitigation	Alternative 1: No Project	Alternative 2: 130 KAFY On-Farm Irrigation System Improvements Only	Alternative 3: 230 KAFY All Conservation Measures	Alternative 4: 300 KAFY Fallowing Only
WQ-7: Increase in selenium concentrations in the IID surface drains discharging directly to the Salton Sea: Selenium concentration to 6.69 µg/L in the IID Surface drain discharge to the Salton Sea exceeding water quality criteria of 5 µg/L.	**Same as Mitigation WQ-2.**	Significant and unavoidable.	Baseline selenium concentration in the IID surface drain discharge to the Salton Sea of 4.80 µg/L.	Same as WQ-7 except selenium concentrations to 5.09 µg/L in the IID surface drain discharge to the Salton Sea.	Same as WQ-7 except selenium concentrations to 6.40 µg/L in the IID surface drain discharge to the Salton Sea.	Beneficial impact: selenium concentration decreases to 4.61 µg/L in the IID surface drain discharge to the Salton Sea.
3.2 Biological Resources						
No significant impacts (after mitigation) to biological resources were identified. See Table 3.2-1 for a summary of less than significant impacts.						
3.3 Geology and Soils						
No significant impacts (after mitigation) to geology and soils were identified. See Table 3.3-1 for a summary of less than significant impacts.						
3.4 Land Use						
No significant impacts (after mitigation) to land use were identified. See Table 3.4-1 for a summary of less than significant impacts.						

TABLE ES-1
Summary of Significant Impacts and Mitigation Measures

Summary of Potential Impacts from Proposed Project	Summary of Mitigation Measure(s)	Significance after Mitigation	Alternative 1: No Project	Alternative 2: 130 KAFY On-Farm Irrigation System Improvements Only	Alternative 3: 230 KAFY All Conservation Measures	Alternative 4: 300 KAFY Fallowing Only
3.5 Agricultural Resources						
AR-1: Reclassification of up to 50,000 acres of Prime Farmland or Farmland of Statewide Importance: If fallowing were used as a conservation measure, it could be rotational, permanent or a combination of the two. The worst case impact of the Proposed Project would be the permanent fallowing of up to about 50,000 acres of land. This represents up to about 11 percent of the total net acreage in agricultural production within the IID water service area. Assuming all acreage included in the water conservation program was permanently fallowed, this would represent a significant, unavoidable impact to the agriculture resources of the IID water service area.	**Mitigation Measure AR-1:** The only way to avoid or minimize this impact is to prohibit the use of permanent fallowing under the Proposed Project. Otherwise, no mitigation measures have been proposed to avoid or minimize this impact.	Significant and unavoidable.	No permanent conversion of agricultural lands. Baseline of rotational fallowing of about 20,000 acres per year continues.	No impacts.	A3-AR-1: Reclassification of up to 38,300 acres of Prime Farmland or Farmland of Statewide Importance: Significant, unavoidable impact.	A4-AR-1: Reclassification of up to 50,000 acres of Prime Farmland or Farmland of Statewide Importance: Significant, unavoidable impact.

TABLE ES-1
Summary of Significant Impacts and Mitigation Measures

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HCP-AR-2 Conversion of agricultural lands from implementation of the HCP: The worst -case impacts to agricultural resources from the implementation of these components of the Proposed HCP would result in approximately 700 acres of agricultural lands converted to marsh habitat, native forest habitat, or new drainage channels to the Salton Sea. This represents less than 0.5 percent of the average annual net acreage in agricultural production within the IID water service area. However, if these lands are located on Prime Farmland or Farmland of Statewide Importance, implementation of the HCP (IID Water Service Area Portion) would result in a significant, unavoidable impact to agricultural resources.	**Mitigation Measure HCP-AR-2:** The only way to avoid or minimize this impact is to prohibit the use of permanent fallowing under the HCP (IID Water Service Area Portion). Otherwise, no mitigation measures have been proposed to avoid or minimize this impact.	Significant and unavoidable.	No permanent conversion of agricultural lands.	Same as HCP-AR-2.	Same as HCP-AR-2.	Same as HCP-AR-2.

TABLE ES-1
Summary of Significant Impacts and Mitigation Measures

Summary of Potential Impacts from Proposed Project	Summary of Mitigation Measure(s)	Significance after Mitigation	Alternative 1: No Project	Alternative 2: 130 KAFY On-Farm Irrigation System Improvements Only	Alternative 3: 230 KAFY All Conservation Measures	Alternative 4: 300 KAFY Fallowing Only
3.6 Recreation						
R-7: Reduction in Salton Sea elevation would render boat launching and mooring facilities inoperable: The decline in Salton Sea elevation and surface area as a result of the Proposed Project would impact operational boat launching and mooring facilities that provide access to the Salton Sea for recreational boating. The Sea would recede from boating facilities gradually as inflows decline. This impact is anticipated when the elevation of the Salton Sea reaches -230 msl, which is predicted to occur in 2007.	**Mitigation Measure R-7:** Implement one of the following two mitigations: Select HCP (Salton Sea Portion) Approach 2. If Approach 2 is selected, impacts on elevation are avoided, and there are no impacts to boat launching facilities. OR If HCP (Salton Sea Portion) Approach 1 is selected, there would be impacts to the boat launching facilities, so boat launching facilities and access to them must be relocated as the Sea declines to provide ongoing boat launching opportunities. The relocation of these facilities may be temporary and ongoing until the Sea reaches its minimum and stable elevation, at which point permanent facilities must be provided.	Less than significant.		Same impact as R-7.	Same impact as R-7.	Same impact as R-7 but Salton Sea elevation reaches -230 in year 2008.

TABLE ES-1
Summary of Significant Impacts and Mitigation Measures

Summary of Potential Impacts from Proposed Project	Summary of Mitigation Measure(s)	Significance after Mitigation	Alternative 1: No Project	Alternative 2: 130 KAFY On-Farm Irrigation System Improvements Only	Alternative 3: 230 KAFY All Conservation Measures	Alternative 4: 300 KAFY Fallowing Only
R-8: Reduced sport fishing opportunities: Impacts to fisheries, including sport fish and aquatic habitat, could result from an accelerated decrease in the number of fish that inhabit the Salton Sea, as described in Section 3.2, Biological Resources. A reduction in the number of sport fish in the Salton Sea would potentially impact sport-fishing opportunities. Impacts to fisheries, including sport fish and aquatic habitat, potentially would result from an accelerated decrease in the number of fish that inhabit the Salton Sea, as described in Section 3.2, Biological Resources. Anglers' ability to catch sargo would be impacted 1 year earlier (2007) when compared to the Baseline; while life-cycle impacts to other key sport fish are predicted to begin in year 2010.	**Mitigation Measure R-8:** To mitigate this impact, selection of HCP (Salton Sea Portion) Approach 2 would be the only effective measure. This approach would include additional conservation via fallowing or other methods in the IID water service area to allow drain water to continue to flow to the Sea at a rate equal to the Baseline, thereby avoiding impacts to the Sea associated with reduced flow: increased salinity leading to elimination of the sport fishery, elevation decline, and decreased surface area. Additional details of Approach 2 can be found in Chapter 2, Description of the Proposed Project and Alternatives. With implementation of HCP Approach 2, this impact would be avoided; otherwise, the impact remains significant and unavoidable. Until an HCP Approach for the Salton Sea is selected, this impact will remain significant and unavoidable.	Significant and unavoidable unless HCP Approach 2 is implemented.	Life cycle of fish impacted beginning in year 2015.	Same as R-8: projected life-cycle impacts on fish begin in year 2010.	Same as R-8: projected life-cycle impacts on fish begin in year 2010.	Same as R-8, however projected life-cycle impacts on fish are predicted to occur in year 2012.

TABLE ES-1
Summary of Significant Impacts and Mitigation Measures

Summary of Potential Impacts from Proposed Project	Summary of Mitigation Measure(s)	Significance after Mitigation	Alternative 1: No Project	Alternative 2: 130 KAFY On-Farm Irrigation System Improvements Only.	Alternative 3: 230 KAFY All Conservation Measures	Alternative 4: 300 KAFY Fallowing Only
R-9: Reduced opportunity for bird watching and waterfowl hunting: Many avian species rely on the aquatic resources of the Salton Sea for food and habitat. Increasing salinity at the Sea would have the following results: Decreased food supply for fish-eating birds because the reproductive ability of fish would decline (as discussed under Impact R-10 below). Increased disease resulting in direct mortality of avian species, as well as a loss of habitat for avian nesting and foraging sites. Details of the biological impacts to birds are described in Section 3.2, Biological Resources, Impacts BR-44, 46, and 47. The effect of the Proposed Project would be to accelerate changes in fish abundance and the subsequent response of piscivorous birds by about 11 years compared to the Baseline.	**Mitigation Measure R-9:** As described in Chapter 2, Description of the Proposed Project and Alternatives, and in Section 3.0, Environmental Analysis, there are two approaches under consideration for implementation of the Salton Sea Portion of the HCP. Implementation of each of these approaches would mitigate impacts to bird-viewing opportunities at the Salton Sea. HCP (Salton Sea Portion) Approach 1 would create a fish hatchery and 5K acres of ponds that would be maintained for the duration of the project and provide piscivorous birds with a food source to replace the Salton Sea fishery. The ponds would be accessible to the public for bird watching but not for hunting. This approach would mitigate the impact to bird watching to less than significant. The impacts to fowl hunting would remain significant.	Less than significant.	Under the No Project alternative, impacts to fish abundance and thus to piscivorous birds occur in approximately year 2023.	Same as R-9 except Alternative 2 would accelerate the occurrence of changes in fish abundance and the subsequent response of piscivorous birds by about 10 years compared to the Baseline.	Same as R-9 except Alternative 3 would accelerate the occurrence of changes in fish abundance and the subsequent response of piscivorous birds by about 11 years compared to the Baseline.	Same as R-9 except Alternative 2 would accelerate the occurrence of changes in fish abundance and the subsequent response of piscivorous birds by about 6 years compared to the Baseline.

TABLE ES-1
Summary of Significant Impacts and Mitigation Measures

Summary of Potential Impacts from Proposed Project	Summary of Mitigation Measure(s)	Significance after Mitigation	Alternative 1: No Project	Alternative 2: 130 KAFY On-Farm Irrigation System Improvements Only	Alternative 3: 230 KAFY All Conservation Measures	Alternative 4: 300 KAFY Fallowing Only
Mitigation Measure R-9 (cont.):	HCP (Salton Sea Portion) Approach 2 would include additional conservation via fallowing or other methods in the IID water service area to allow drain water to continue to flow to the Sea at a rate equal to the Baseline, thereby avoiding impacts to the Sea associated with the reduced flow: increased salinity leading to elimination of sport fishery, elevation decline, and decreased surface area. Implementation of this approach would avoid impacts to bird watching and hunting. Additional details of Approach 2 can be found in Chapter 2, Description of the Proposed Project and Alternatives.					

TABLE ES-1
Summary of Significant Impacts and Mitigation Measures

Summary of Potential Impacts from Proposed Project	Summary of Mitigation Measure(s)	Significance after Mitigation	Alternative 1: No Project	Alternative 2: 130 KAFY On-Farm Irrigation System Improvements Only	Alternative 3: 230 KAFY All Conservation Measures	Alternative 4: 300 KAFY Fallowing Only
R-10: Reduction in Salton Sea elevation could impact campgrounds and ancillary facilities: When water levels at the Salton Sea SRA drop to 230 feet below msl, it would be necessary to relocate facilities, such as Varner Harbor and campgrounds, that are now located near the water. It also would be necessary to re-establish existing roads and trails that lead to the water, particularly in areas such as Mecca Beach, Sneaker Beach, and Old Camp. Decreasing water levels would expose footings and other remnants of the campgrounds that were covered when the water elevation increased during the late 1970s. These would have to be removed for safety and aesthetic considerations. Implementation of the Proposed Project would result in the elevation of the Salton Sea reaching –230 msl by the year 2007, compared to 2010 under the Baseline, a three-year acceleration. In addition to accelerating the time when campgrounds are stranded from their existing location, the Proposed Project would result in an ultimate elevation of the Sea of approximately –250 compared to -235 under the Baseline.	**Mitigation Measure R-10:** Implement one of the following two mitigations: Select HCP (Salton Sea Portion) Approach 2. If Approach 2 is selected, impacts to the elevation are avoided, and there are no impacts to camping and ancillary facilities. OR If HCP (Salton Sea Portion) Approach 1 is selected, there would be impacts on the camping facilities, so these facilities must be relocated as the Sea declines to provide ongoing camping opportunities. The relocation of these facilities may be temporary and ongoing until the Sea reaches its minimum, stable elevation, at which point permanent facilities must be provided.	Less than significant.	Elevation -230 feet msl is reached in year 2010 and the 2077 elevation of the Salton Sea is predicted to be -235 feet msl.	Same as Impact R-10 except that Salton Sea elevation reaches -230 feet msl in year 2006, and the 2077 elevation of the Salton Sea is predicted to be -235 feet msl.	Same as Impact R-10 except that Salton Sea elevation reaches -230 feet msl in year 2007, and the 2077 elevation of the Salton Sea is predicted to be -242 feet msl.	Same as Impact R-10 except that Salton Sea elevation reaches -230 feet msl in year 2008, and the 2077 elevation of the Salton Sea is predicted to be -241 feet msl.

TABLE ES-1
Summary of Significant Impacts and Mitigation Measures

Summary of Potential Impacts from Proposed Project	Summary of Mitigation Measure(s)	Significance after Mitigation	Alternative 1: No Project	Alternative 2: 130 KAFY On-Farm Irrigation System Improvements Only	Alternative 3: 230 KAFY All Conservation Measures	Alternative 4: 300 KAFY Fallowing Only
3.7 Air Quality						
AQ-3: Windblown dust from fallowed land: Depending on the amount of land that is fallowed and the way the land is managed before and during fallowing, the potential exists for fugitive dust impacts. On occasion, existing concentrations of PM_{10} in the IID water service area violate national and state ambient air quality standards. To be conservative, this analysis concludes that the fugitive windblown dust emissions associated with additional exposed areas due to fallowing would be potentially significant. Up to 84,800 acres could be fallowed for the Proposed Project including conservation for transfer, for the IOP, and for HCP Approach 2.	**Mitigation Measure AQ-3:** As lands are fallowed, at least one of the following BMPs to minimize PM_{10} emissions must be implemented. BMPs could include, but are not limited to, the following: Implement conservation cropping sequences and wind erosion protection measures as outlined by the U.S. Department of Agriculture Natural Resources Conservation Service. Apply soil stabilization chemicals to fallowed lands. Re-apply drain water to allow protective vegetation to be established. Reuse irrigation return flows to irrigate windbreaks across blocks of land including many fields to reduce wind fetch and reduce emissions from fallowed, farmed, and other lands within the block.	Less than significant.	Continuation of current fallowing of about 20,000 acres per year.	Same as AQ-3 except the maximum number of fallowed acres would be 20,600.	Same as AQ-3 except the maximum number of fallowed acres would be 67,300.	Same as AQ-3.

TABLE ES-1
Summary of Significant Impacts and Mitigation Measures

Summary of Potential Impacts from Proposed Project	Summary of Mitigation Measure(s)	Significance after Mitigation	Alternative 1: No Project	Alternative 2: 130 KAFY On-Farm Irrigation System Improvements Only	Alternative 3: 230 KAFY All Conservation Measures	Alternative 4: 300 KAFY Fallowing Only
AQ-4: Emissions from construction and operation of on-farm and delivery system conservation measures for compliance with the IOP: In the worst-case scenario for air quality impacts, conservation of an average 59 KAFY for compliance with the IOP would be generated by constructing on-farm and water delivery system conservation measures. This scenario, however, is highly unlikely because IID is required to pay back overruns within 1-3 years, and it would be onerous to construct sufficient conservation measures as quickly as would be necessary to meet this payback deadline. If construction of certain on-farm measures is undertaken to conserve more than about 25 to 30 KAFY in any given year, there is potential to exceed general conformity *de minimus* thresholds (100 tons per year) for the nonattainment pollutants ozone (ROC and NOx) and PM_{10}.	**Mitigation Measure AQ-4:** If construction of sufficient magnitude is proposed for any given year, assuming construction emissions are determined to be the direct or indirect result of a federal action, a general conformity determination for that federal action would be required. General conformity requirements in the IID water service area are outlined in Rule 925 of the ICAPCD and the USEPA General Conformity Rule.	Less than significant.	Continuation of existing air quality conditions.	Same as AQ-4.	Same as AQ-4.	Same as AQ-4.

TABLE ES-1
Summary of Significant Impacts and Mitigation Measures

Summary of Potential Impacts from Proposed Project	Summary of Mitigation Measure(s)	Significance after Mitigation	Alternative 1: No Project	Alternative 2: 130 KAFY On-Farm Irrigation System Improvements Only	Alternative 3: 230 KAFY All Conservation Measures	Alternative 4: 300 KAFY Fallowing Only
HCP2-AQ-6: Windblown dust from fallowing plus emissions due to construction and operation of on-farm and water delivery system conservation measures for HCP Approach 2: Implementation of HCP Approach 2 could be accomplished via construction of on-farm or water delivery system improvements or fallowing. It is most likely that this conserved water would be generated via fallowing. However, if conservation measures are constructed, the maximum that would be constructed in 1 year to provide mitigation for the Salton Sea as flows to the Sea are reduced would be measures that would save about 12 KAFY. Construction of measures to conserve 12 KAFY would result in similar impacts in the IID water service area and the AAC to those described for AQ-2 in Section 3.7.4, Impacts and Mitigation Measures. If fallowing is implemented, impacts would be similar to those described under Impact AQ-3.	**Mitigation Measure HCP2-AQ-6:** This impact would be less than significant with implementation of Mitigation Measures AQ-2 and AQ-3. (For AQ-2, see Section 3.7.4, Impacts and Mitigation Measures.)	Less than significant.	Continuation of existing air quality conditions.	Same as Impact HCP2-AQ-6.	Same as Impact HCP2-AQ-6.	Same as Impact HCP2-AQ-6.

TABLE ES-1
Summary of Significant Impacts and Mitigation Measures

Summary of Potential Impacts from Proposed Project	Summary of Mitigation Measure(s)	Significance after Mitigation	Alternative 1: No Project	Alternative 2: 130 KAFY On-Farm Irrigation System Improvements Only	Alternative 3: 230 KAFY All Conservation Measures	Alternative 4: 300 KAFY Fallowing Only
AQ-7: Indirect air quality impacts due to the potential for windblown dust from exposed shoreline: The predicted decrease in Sea level and increase in exposed area (50,000 acres compared to the Baseline) would increase the potential for dust suspension. Spatial variations in sediment characteristics and soil erodibility, temporal variations in wind conditions, and variation in factors contributing to the formation of salt crusts prevent any reasonable quantitative estimate of emissions and associated impacts from the exposed shoreline. Therefore, a qualitative assessment of the potential for dust suspension is provided in this Draft EIR/EIS. To be conservative, this analysis concludes that windblown dust from exposed shoreline may result in significant air quality impacts. (Details provided in Section 3.7 Impact AQ-7.)	**Mitigation Measure AQ-7:** To mitigate this impact, selection of HCP (Salton Sea Portion) Approach 2 would be the only effective measure. This approach would include additional conservation, via fallowing or other measures in the IID water service area, to allow drain water to continue to flow to the Sea at a rate equal to the Baseline, thereby avoiding impacts to the Sea and shoreline associated with the reduced flow. Additional details of Approach 2 can be found in Chapter 2, Description of the Proposed Project and Alternatives. With implementation of this approach, this impact would be avoided; without it, this impact would remain potentially significant and unavoidable.	Significant and unavoidable.	16,000 acres of exposed shoreline predicted for 2077.	Same as AQ-7 except that 22,000 acres of exposed shoreline predicted.	Same as AQ-7 except that 39,000 acres of exposed shoreline predicted.	Same as AQ-7 except that 16,000 acres of exposed shoreline predicted.

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3.8 Cultural Resources						
CR-1: Construction of measures from water conservation program: Potential impacts to cultural resources could result because several conservation measures involve ground disturbance. It is difficult to quantify the relative impact of the conservation measures on archaeological sites that might be present. Depending on the nature of the cultural resource, the impact, and the ability to modify construction activities to avoid or minimize the impact, impacts on cultural resources could be significant. (Note that if fallowing is used as the exclusive conservation measure under the Proposed Project, there would be no impacts, and no mitigation measures would be required.)	**Mitigation Measure CR-1:** Construction of conservation measures can occur anywhere within the IID water service area; therefore, pre-Project surveys have not been conducted. Mitigation measures included in Section 3.8 CR-1 have been designed to provide assurances that if cultural resources are encountered during Project construction or operation, they will be handled appropriately.	Less than significant.	N/A	Same as CR-1.	Same as CR-1.	No impact.

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Summary of Potential Impacts from Proposed Project	Summary of Mitigation Measure(s)	Significance after Mitigation	Alternative 1: No Project	Alternative 2: 130 KAFY On-Farm Irrigation System Improvements Only	Alternative 3: 230 KAFY All Conservation Measures	Alternative 4: 300 KAFY Fallowing Only
CR-2: Construction of conservation measures for IOP compliance: Potential impacts to cultural resources could result for the same reasons discussed above under Impact CR-1. Impacts on cultural resources could be significant.	**Mitigation Measure CR-2:** Construction of conservation measures can occur anywhere within the IID water service area; therefore, pre-Project surveys have not been conducted. The same mitigation measures listed under Mitigation Measure CR-1 would apply to this impact to provide assurances that if cultural resources are encountered during Project construction or operation, they will be handled appropriately.	Less than significant.	N/A	Same as CR-2.	Same as CR-2.	Same as CR-2.
HCP-CR-3: Creation of Managed Marsh Habitat: Potential impacts to cultural resources could result during ground disturbance and construction activities. For the same reasons as discussed above under Impact CR-1, impacts on cultural resources could be significant.	**Mitigation Measure HCP-CR-3:** The exact location of the managed marsh habitat in the IID water service area has not been determined; therefore, pre-Project surveys have not been conducted. The same mitigation measures listed under Mitigation Measure CR-1 would apply to this impact to provide assurances that if cultural resources are encountered during Project construction or operation, they will be handled appropriately.	Less than significant.	N/A	Same as HCP-CR-3.	Same as HCP-CR-3.	Same as HCP-CR-3.

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Summary of Significant Impacts and Mitigation Measures

Summary of Potential Impacts from Proposed Project	Summary of Mitigation Measure(s)	Significance after Mitigation	Alternative 1: No Project	Alternative 2: 130 KAFY On-Farm Irrigation System Improvements Only	Alternative 3: 230 KAFY All Conservation Measures	Alternative 4: 300 KAFY Fallowing Only
HCP2-CR-4: Construction of conservation measures for HCP Approach 2: Potential impacts to cultural resources could result from ground disturbance and construction activities unless fallowing is the only conservation measure employed to conserve additional water for mitigation under this HCP approach. The amount of conservation would be scaled based on the amount of water to be conserved. For the same reasons as discussed above under Impact CR-1, impacts on cultural resources could be significant.	**Mitigation Measure HCP2-CR-4:** The exact location of the conservation measures in the IID water service area has not been determined; therefore, pre-Project surveys have not been conducted. The same mitigation measures listed under Mitigation Measure CR-1 would apply under this HCP approach to provide assurances that if cultural resources are encountered during Project construction or operation, they will be handled appropriately.	Less than significant.	N/A	Same as HCP2-CR-4.	Same as HCP2-CR-4.	Same as HCP2-CR-4.

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CR-5: Reduced inflows to the Salton Sea: Reduced inflows to the Salton Sea from the Proposed Project's water conservation program (see Section 3.1, Hydrology and Water Quality) would lower the Sea's level. Lower Sea level would, in turn, expose submerged land. Newly exposed land could contain archaeological sites that could be vandalized if they were not protected. Newly exposed land could also be cultivated or developed, thus harming any archaeological sites if they were not protected.	**Mitigation Measure CR-5:** Gradual exposure of submerged lands could expose archaeological sites if they are present. The same mitigation measures listed under Mitigation Measure CR-1 would apply to this impact to provide assurances that if cultural resources are encountered during Project construction or operation, they will be handled appropriately. In addition, a series of archaeological surveys at regular intervals (once every 3 years) will be conducted to check freshly exposed lands for the presence/absence of archaeological sites.	Less than significant.	16,000 acres of exposed shoreline predicted for 2077.	Same as CR-5 except that 22,000 acres of exposed shoreline predicted.	Same as CR-5 except that 39,000 acres of exposed shoreline predicted.	Same as CR-5 except that 16,000 acres of exposed shoreline predicted.

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3.9 Indian Trust Assets						
ITA-1: Potential adverse and/or beneficial impacts on ITAs from reduced inflow to Salton Sea: The Salton Sea is expected to decline from its current elevation of about -228 feet to about elevation -250 feet over the 75-year duration of the Proposed Project. This would result in the exposure of land containing natural and cultural resources that are considered by the Torres Martinez to be ITAs. This could have both adverse and beneficial impacts. Beneficial impacts could result from allowing scientific investigations of exposed resources, including archaeological data collection and natural resource exploitation. Exposure also could result in damage from vandalism and erosion.	None provided.	N/A	The 2077 elevation of the Salton Sea is predicted to be -235 feet msl.	Same as ITA-1 except that the 2077 elevation of the Salton Sea is predicted to be -242 feet msl.	Same as ITA-1 except that the 2077 elevation of the Salton Sea is predicted to be -247 feet msl.	Same as ITA-1 except that the 2077 elevation of the Salton Sea is predicted to be -241 feet msl.
3.10 Noise						
N-1: Noise impacts to sensitive receptors from construction of conservation measures: Noise resulting from construction could exceed County of Imperial construction noise standards, impacting sensitive receptors including riparian bird species.	**Mitigation Measure N-1:** Several measures would be implemented to reduce noise resulting from construction activities. (Measures are described in detail in Section 3.10.)	Less than significant.	N/A	A2-N-1: Noise impacts to sensitive receptors from construction of conservation measures: Less than significant impact with mitigation.	A3-N-1: Noise impacts to sensitive receptors from construction of conservation measures: Less than significant impact with mitigation.	No impact.

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N-2: Exposure to long-term operation noise: Several on-farm and delivery system conservation measures, including tailwater return systems, drip irrigation, lateral interceptor systems, mid-lateral reservoirs, and seepage interceptors, require the operation of pumps that produce noise at various levels, some more than 70 dBA at 50 feet. These pumps could potentially exceed the Normally Acceptable noise/land use compatibility guideline of 70 dBA.	**Mitigation Measure N-2:** If possible, conservation system pumps would be located at sufficient distances from sensitive receptors to ensure that noise levels at the receptor do not exceed the 70 dBA guideline. If there is no flexibility in placement of equipment, permanent or temporary barriers/semi-enclosures would be placed over the pumps to ensure adherence to the guideline. Implementation of this measure would reduce potentially significant noise impacts from conservation system pump operation in the IID water service area to a less than significant level.	Less than significant.	N/A	A2-N-2: Exposure to long-term operation noise: Less than significant impact with mitigation.	A3-N-2: Exposure to long-term operation noise: Less than significant impact with mitigation.	No impact.

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N-3: Noise impacts from lateral interceptor pumps: Lateral interceptor system pumps, which could operate up to approximately 50 percent of the time at 78 dBA, would exceed the county's operation noise standard of 75 dB (averaged sound level over 1 hour) for agriculture operations.	**Mitigation Measure N-3:** If possible, lateral interceptor system pumps would be located at sufficient distances from sensitive receptors to ensure that noise levels at the nearest receptor do not exceed the Normally Acceptable noise/land use compatibility guideline of 70 dBA. If there is no flexibility in placement of the pumps, permanent or temporary barriers/semi-enclosures will be placed over the pumps to ensure adherence to the standard. Implementation of this measure would reduce potentially significant noise impacts from lateral interceptor system pump operation in the IID water service area to a less than significant impact.	Less than significant.	N/A	No impact.	A3-N-3: Noise impacts from lateral interceptor pumps: Less than significant impact with mitigation.	No impact.

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N-4: Noise from compliance with the IOP: Conservation of 59 KAFY for the IOP can be accomplished via fallowing (about 9,800 acres) or other conservation measures. Noise impacts could occur during construction of additional on-farm irrigation system improvements or water delivery system improvements as described in Impact N-1 through N-3. This conservation would be in addition to the up to 300 KAFY for the Proposed Project and is part of the Proposed Project. If fallowing is selected for IOP compliance, about 9,800 additional acres would be required, and no noise impacts would occur.	**Mitigation Measure N-4:** See Mitigation Measures N-1 through N-3.	Less than significant.	N/A	Same as N-4.	Same as N-4.	Same as N-4.

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HCP-N-5: Noise impacts to sensitive receptors from construction of new marsh habitat or drain channels: Construction of new marsh habitat and drain channels would require the use of standard construction equipment such as backhoes, excavators, and utility trucks. Each of these pieces of equipment emits noise at a minimum of 77 dBA, which exceeds the County of Imperial construction noise standards. Therefore, the noise impact to sensitive receptors, including riparian bird species, from construction associated with creation of marsh habitat or drain channels is potentially significant.	**Mitigation Measure HCP-N-5.** Implementation of the measures described above in Mitigation Measure N-1, especially limiting construction activities to non-mating, non-nesting seasons, would reduce potentially significant noise impacts to less than significant levels.	Less than significant.	N/A	Same as HCP-N-5.	Same as HCP-N-5.	Same as HCP-N-5.

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3.11 Aesthetics						
Impact A-1: Impacts on aesthetics would result from a decrease in the elevation of the Salton Sea: The Proposed Project would primarily affect views of the Salton Sea landscape as seen from public shoreline recreation areas and more distant public roadways. The specific visual effects and their severity would vary according to the affected viewer's location and activity. In general, it is anticipated that views most affected by the Project would be at public recreation locations situated near the existing shoreline. The shoreline is excepted to decline to -250 feet msl by 2077.	**Mitigation Measure A-1:** These measures should implemented on an ongoing basis as the Sea recedes until it reaches its lowest and stable elevation, at which point they should be made permanent. The measures to be undertaken in the Salton Sea area include: Relocate recreation facilities and extend access to the new shoreline to provide quality public viewing opportunities of the Salton Sea and its shoreline. These facilities may be temporary until the Sea reaches its minimum and stable elevation. Develop interpretive facilities and material to be made available to the public at recreation areas and along public roadways. Interpretive displays may include historic photographs of the Salton Sea landscape and information about water conservation measures including their effects on Salton Sea water levels.	Less than significant.	The 2077 elevation of the Salton Sea is predicted to be -235 feet msl.	Same as A-1 except that the 2077 elevation of the Salton Sea is predicted to be -242 feet msl.	Same as A-1 except that the 2077 elevation of the Salton Sea is predicted to be -247 feet msl.	Same as A-1 except that the 2077 elevation of the Salton Sea is predicted to be -241 feet msl.

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3.12 Public Services and Utilities						
No significant impacts (after mitigation) to public services and utilities were identified. See Table 3.12-1 for a summary of less than significant impacts.						
3.13 Transportation						
No significant impacts (after mitigation) to transportation were identified. See Table 3.13-1 for a summary of less than significant impacts.						
3.14 Socioeconomics						
S-2: Net loss of 1,400 jobs and reduction in business output of $97.5 million with conservation by fallowing only.	The actual distribution of transfer revenues has not been identified by IID and might vary over the term of the Proposed Project. Some dollar value must be estimated to evaluate the potential impact; therefore, for this analysis it is assumed that all transfer revenues not spent by IID on water delivery system improvements, program administration, or environmental or mitigation measures pursuant to the Final EIR/EIS or HCP will be passed on to participating farmers.	N/A	Continuation of existing conditions, including the historic variation in agricultural employment levels.	No impact.	A3-S-2: Net loss of 1,090 jobs and reduction in business output of $75.8 million with conservation by fallowing only.	A4-S-1: Net loss of 1,400 jobs and reduction in business output of $97.5 million with conservation by fallowing only.

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S-3: Loss of 290 jobs and reduction in business output of $20 million from conserving IOP water by fallowing only.	Same as above.	N/A	Continuation of existing conditions, including the historic variation in agricultural employment levels.	Same as S-3.	Same as S-3.	Same as S-3.
HCP2-S-4: Loss of up to 750 jobs and reduction in business output of $52 million from fallowing under HCP Approach 2.	Same as above.	N/A	Continuation of existing conditions, including the historic variation in agricultural employment levels.	Same as HCP2-S-4.	Same as HCP2-S-4.	Same as HCP2-S-4.

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S-5: Adverse change in regional economic conditions would be accelerated by up to 11 years.	None provided unless HCP Approach 2 is selected.	N/A	Eventual loss of the majority of the recreation-related economic activity as a result of the deterioration of the biological resources that support current recreation activities. Decreased economic activity would put downward pressure on property values.	Same as S-5.	Same as S-5.	Same as S-5.

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3.15 Environmental Justice						
EJ-1: Potential Effects on Minority and Low-Income Populations: No tribal lands would be disproportionately affected within this subregion. However, farm laborers could be affected as a group by fallowing activities and on-farm irrigation system conservation measures, which would reduce the demand for farm labor in some areas. This effect would not disproportionately affect a specific community or area but could affect farm laborers, who are predominantly minority and low-income, as a population group. At the present time, no specific locations for fallowing have been identified. Under the worst case, up to 50,000 acres could be fallowed to provide conserved water for the transfer. Another 25,000 acres could be fallowed to provide water for mitigation and 8,900 for compliance with the IOP. The locations of land to be fallowed will depend on the willingness of the farmer to do so.	None provided.	N/A	Same as existing condition.	Same as EJ-1 except the maximum number of fallowed acres would be 20,600.	Same as EJ-1 except the maximum number of fallowed acres would be 67,300.	Same as EJ-1.

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HCP2-EJ-1: Potential Effects on Minority and Low-Income Populations: As noted previously, land fallowing has the potential to directly affect farm laborer populations, depending on the scale of the fallowing program that is implemented. The effect on this population group would be a loss of employment resulting from the reduction in acres that are in agricultural production. It should be noted that 75,000 acres is a worst-case scenario, and that the number of acres to actually be fallowed may be substantially less, with a correspondingly smaller overall effect on farm employment. No other disproportionate effects are expected on other minority and low-income communities, including tribal groups.	None provided.	N/A	Same as existing condition.	Same as HCP2-EJ-1.	Same as HCP2-EJ-1.	Same as HCP2-EJ-1.